



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

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REPLY TO THE ATTENTION OF:

SRF-5J

SEP 11 1997

Mr. John S. Applegate,
Chair
Fernald Citizen's Advisory Board
P.O. Box 544
Ross, Ohio 45061

RE: Dispute Comment Period
Extension

Dear Mr. Applegate:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of your letter on behalf of the Fernald Citizen's Advisory Board (FCAB) received by facsimile on September 2, 1997.

The letter requests an extension of the Operable Unit 4 dispute resolution settlement comment period for an additional thirty (30) days, to allow the FCAB an opportunity to further review the environmental projects selected as part of the settlement.

U.S. EPA concurs with the extension request and is extending the comment period through October 3, 1997.

Enclosed is further information made available to U.S. EPA during the dispute negotiations regarding various environmental projects. However, only those projects which were ultimately incorporated into the dispute settlement document were consistent with U.S. EPA policy and guidance regarding this matter. The other projects which were not selected, were either deemed to be projects U.S. DOE would have completed regardless of the dispute, or were not related to cleanup activities at the site.

I would be glad to discuss these projects with the FCAB in future meetings. Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,

James A. Saric
Remedial Project Manager
Federal Facilities Section
SFD Remedial Response Branch #2

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Enclosure

cc: Tom Schneider, OEPA-SWDO
Johnny Reising, U.S. DOE-Fernald
Terry Hagen, FERMCO

**POTENTIAL OFFSITE SUPPLEMENTAL ENVIRONMENTAL PROJECTS
(LEGAL IMPLEMENTABILITY BEING EVALUATED)**

Community Emergency Response Programs

The communities of Crosby, Morgan and Ross Townships and the Village of Millville have agreed in principal to pursue the development of a "model organization" that will allow for the privatization of the emergency response program at the Fernald Environmental Management Project (FEMP). The proposed model organization will provide full time emergency response services (fire, ambulance, hazardous material, and confined space rescue) to the FEMP and supplemental first response emergency services to the involved communities. This model organization will be totally separate from the FEMP and be closely aligned with the listed communities, much like a special fire district. Funding for this organization would initially be derived from contracts with the FEMP for the provision of services (fire, EMS, hazmat, alarm services, suppression system inspection and testing etc.). After a period of time the communities could elect to expand the fire district concept to include their current emergency organizations; the need for the organization could decrease based on hazard reduction at the FEMP and the lack of interest on the part of the communities to expand the concept; or alternate funding sources may be identified to keep the "special district" or expand it in other areas.

One such alternate revenue generating source that has been identified is the establishment of a training facility for emergency response services and OSHA type training. This concept includes the utilization of members of the "model organization" not only as emergency response personnel, but also as subject matter experts that could assist in the development and presentation of training classes at a facility that would jointly house the emergency services organization and the training classrooms and necessary props. This site could become a regional training facility for construction organizations that are currently developing a passport type safety training system for workers and industrial customers; another branch of this training facility could be for a "world class" emergency training center that offers training courses not currently available locally.

Public Health/Protection/Emergency Preparedness

Using site emergency response personnel and site personnel with Red Cross training, or using Red Cross personnel, sponsor first aid/"what to do classes" for neighboring communities such as Ross, New Baltimore, and Harrison. Courses could be held at locations such as the Plantation, Strickers, Ross Fire Hall -- approximately two hours of first aid refreshers covering accidents like skinned knees, cutting fingers with kitchen knives, insect bites, etc. Attendees would receive a first aid kit and a first aid manual.

Upgrade/Construction of Water Treatment Facility

The average life of a water treatment plant is about 25 years. The Bolten Plant is well within the first third of its useful life. A fund could be put in place to upgrade or fund the construction of a new water treatment facility when the Bolten Plant becomes obsolete or past its useful life. This would help to insure that an adequate water supply is available to the residents that had been affected by the contamination of the GMA.

Purchase of Property Adjacent to FEMP to Facilitate Aquifer Restoration

In order to facilitate overall implementation of optimal GMA restoration efforts, direct access to the land surface is essential. Areas off of the FEMP property are in private ownership. Purchase of land directly South of the FEMP would greatly facilitate this activity.

Salt Storage Shed

Morgan Township currently stores their salt in an old pole building which is located in a flood plain. Their concern is that a major flood would not only wash their salt away, but would allow a high salt concentration to enter an adjacent stream. Other comments:

- On the average, they use 300 tons of salt per year to make their roads safe to travel in the winter season. They need a facility that would be able to store 200 tons of salt, which they estimate would need to be 12' - 16' in width, 16' high, and 30' 40' long.
- The shed would have a door and a concrete pad and would be constructed with either treated wood or concrete. The category of "Environmental Compliance Promotion" could apply to both projects, and the Salt Shed would also be a strong candidate for "Pollution Prevention."

Bike Path Linkages

Regional planners have a long-term goal of expanding and connecting several area bicycle paths. In fact, possible linkage routes may already have been planned. DOE could contribute to this effort, providing over-road expansion of the Shaker Trace Trail (within Miami Whitewater Forest) to one or more bicycle paths in Hamilton and Cincinnati. This would involve spot road improvements, such as bike lane painting, installing signs, and sewer grate replacing. DOE could work with planners to locate a route adjacent to the FEMP so that once final land use is established, a side trail could be routed through the restored site. Efforts could also be made to construct dedicated bike paths. The OKI Regional Bicycle Plan lists several such bike paths that are being planned and implemented in the area.

Research Grants for Ecological Restoration Efforts

DOE could establish a research grant program that focuses entirely on ecological restoration. Restoration ecology is a relatively new field of study that is gaining in popularity and will have direct applicability to natural resource restoration efforts at the FEMP. Funds could be granted to regional universities for research on woodlot/prairie revegetation, bioengineering for erosion control, stream restoration, wetland restoration, invasive species control, and monitoring.

Off-Property Acquisition of Habitat

This would involve the off-property acquisition of a tract of land west of Paddys Run road, which is a deciduous woodlot containing a wetland which provides diverse habitat for salamanders. This type of habitat is rare and could be protected by allowing the Nature Conservancy to manage and designate this area as protected.

Wild Bird Sanctuary/Wild Flowering Plant Observatory

Develop a Wild Bird Sanctuary, promote natural habitats, include "Learn Here Stations" at each habitat site along a trail and at the main station (atrium). Set up a foundation that will provide funds for management for at least the duration of the AWWT is continued.

Develop a Wild Flowering Plant Observatory. This can be made to become an attraction for residents and visitors to the area with feature plants that are natural to the Tri-State area. Also, add two blooming events that will receive media attention due to its size, beauty, quality, designed with the intent to be appealing. At Easter and Christmas, feature displays for the events, add a lighting display to attract the visitors.

WATERBURY PROTECTION / PESTICIDE REDUCTION PROJECTS - G.M.A. -

**POTENTIAL ONSITE SUPPLEMENTAL ENVIRONMENTAL PROJECTS
(LEGAL IMPLEMENTABILITY BEING EVALUATED)**

Relocate Material Release Facility

Relocate the Material Release Facility from Building 78 to a Tension Support Structure to be located near the southwest corner of the FEMP. This will be required due to the D&D of Building 78 scheduled to begin in October 1997. This proposal would give the Material Release Facility a base of operations for the duration of the accelerated cleanup schedule.

The Material Release Facility will house a portable blasting booth where scrap metal can be decontaminated using a vacuum grit blaster and sent out to scrap vendors for reuse/recycling. This activity is currently performed in Building 78. This project's value as a Supplemental Environmental Project is contained within the ability to reuse/recycle scrap metal from former process buildings. This would reduce the overall amount of construction debris that would require burial in the OSDF and return hundreds of tons of steel back into the marketplace. Also contained within the Material Release Facility will be the Sodium Bicarbonate blasting system. This system decontaminates scrap material using sodium bicarbonate, an environmentally friendly, water soluble media. This blasting system has great potential for material decontamination when lead-based paint is involved, or when the substrate material must not be damaged. Some examples of future efforts would include the decontamination of the hundreds of tons of lead counterweights and scrap currently on site, and experimentation with the decontamination of transite.

Crusher

The current plan for OU3 concrete (60,000 cubic yards) is to place it into the OSDF. A possible SEP would be further size reduction using a concrete crusher. ANL/ICF have developed a machine like this for use at Hanford and are looking for other users. This would directly address an OEPA issue by reducing the volume of waste to the cell and minimizing compaction concerns for the cell. ~~You could build upon this idea by installing bike trails made of your crushed product (paved over, of course) at the site. Maybe someday, the county could hook up our course with the Miami Whitewater course to extend the existing 13 mile loop which has a close approach to the site's NW corner.~~

Establish Aesthetic Barriers at the FEMP

Some of this activity is currently part of the Natural Resource Restoration Plan. This would involve the establishment of hedgerows using densely planted indigenous trees and shrubs that will provide both a visual buffer between public roads and OSDF construction activities and provide habitat for edge-dwelling wildlife. Effective visual screening could be achieved through dense planting of indigenous evergreens and hardwoods with dense twig structure. The aesthetic barriers would appear as natural hedgerows typical of rural roadsides in agricultural landscapes.

(4) MICROWAVE TECHNOLOGY - TO PREFERENTIALLY EXTRACT chemicals of interest.
FROM GW. Doing TECHNOLOGY DEMONSTRATION ⇒ DOE SHOULD DO THIS NOT EPA (INCINERATION)

(5) ON-SITE TREATMENT OF ⁵PANTRY LOT WATER RATHER THAN DIRECT
DISCHARGE TO ~~ANAL~~
PANTRY'S LWP.

ATTACHMENT B

PROJECT 1 : ESTABLISHMENT OF A CONSERVATION AREA NEAR THE FEMP

This proposal involves establishing a conservation area on a piece of property that is considered to have high ecological value in the area surrounding the FEMP. Ideally, this area would contain habitats such as riparian areas, wetlands, etc. The proposal would involve DOE and the Regulatory Agencies working with groups such as the Nature Conservancy, the U.S. Fish and Wildlife Service and/or the Ohio Department of Natural Resources to establish a Conservation area on the property. The Conservation area would allow preservation of habitat near the site and would further enhance the proposed Natural Resource Restoration Plan for the FEMP by preserving habitat contiguous with the restored FEMP Site.

Further research would be needed on any piece of property targeted for an easement to determine if the current landowners are willing to cooperate in the establishment of the easement and exactly what the cost would be. The targeted property would be between 30 and 100 acres in size. The establishment of a conservation easement is expected to cost less than the cost of purchasing.

A proposal outlining the proposed property for the area would be submitted to the Agencies no later than November 21, 1997, for review and approval by U.S. EPA.

PROJECT 2: RESEARCH GRANTS FOR ECOLOGICAL RESTORATION

This proposal would provide a great deal of flexibility in terms of cost and schedule for implementation. Essentially DOE would be able to establish grant(s) for whatever dollar amount they chose and establish time frames for the grants that fit the proposed research projects (e.g., annual or biannual). The recommended approach for initiating this proposal would be to identify a set dollar amount as negotiated with the Agencies. The focus of the grants would be to implement research projects involving actual field work (as opposed to only "paper" or "conceptual" research) that would support the proposed restoration efforts at the FEMP. Input would be solicited from Universities participating in the Technical University Program on what type of research would be feasible and beneficial in this region. DOE, in conjunction with the Regulatory Agencies, could review and select the proposals that were determined to be most beneficial. The schedule for conducting the actual research would be dependent on the project that was selected. The general areas of ecological restoration research that would be emphasized are as follows:

Representative Vegetation Plots - The purpose of this research would be to establish vegetation plots that would be representative of the habitats that are targeted for establishment as part of site restoration plans (e.g., riparian, wetland, grassland, Oak-Hickory forests). Permanent plots would be established by placing reinforcement bars at specified areas where follow-up monitoring such as vegetative measurements would occur. The monitoring would focus on the success of the plots and how external influences and management practices influence the various habitats.

Pilot Restoration Projects for Target Species - This research would focus on the success of restoration techniques for targeted species that have specific relevance in this area. The species of interest could be species that are listed for protection (i.e., threatened or endangered species at the state or federal level) or species that would be typical of the land-uses proposed for establishment at the FEMP. The results of the pilot restoration projects would provide information directly applicable to the proposed restoration of the site.

Invasive Species Control - Various techniques for control of non-native species could be employed. These techniques would involve biocontrol methods such as the introduction of plant-specific insects which feed on invasives. Properties of invasive species could be examined to determine their effect on native vegetation.

Techniques for Success Monitoring - Techniques for monitoring the success at the habitat level and/or the species level to ensure that restoration techniques are meeting established goals. Possibilities could include photo monitoring, satellite imagery, etc. As with the specific proposals above, techniques that prove successful could be implemented as part of the restoration efforts at the FEMP.

The precise schedule for each individual grant would vary depending on the scope of the research proposed. Areas of the FEMP that will be targeted for the research will have to be certified clean prior to implementation. Areas that will be targeted will likely be west of Paddys Run. Through the implementation of an accelerated certification process, areas west of Paddys Run can be certified by July of 1998. In parallel with the certification process, a workplan outlining proposed research projects will be developed and submitted to the Agencies by November 21, 1997, for review and approval by U.S. EPA.

PROJECT 3: CREATION OF WILD BIRD/WILD FLOWER HABITAT AREA

The goal for this proposal would be to create a protected habitat for regional species of wild birds and wildflowers both in the same area of the FEMP. Ideally, this project would be implemented in an area that would provide aesthetic appeal to employees, visitors and neighbors. The project would have to be implemented in an area that has been certified clean and is expected to require the construction of a shelter and access. The installation of electricity or other utilities for the Habitat Area is not expected to be necessary with the possible exception of water. The costs for the proposal would include planting wildflowers, installing feeders, creating pathways and installing a bird blind.

As with the previous project, the area selected for the habitat area will have to be certified clean prior to implementation. Options for the location of this project would likely be limited to Area 1, Phase I or an area west of Paddys Run. As stated previously, it is anticipated that the area west of Paddys Run can be certified by July of 1998 through an accelerated certification program. In parallel with certification efforts, a Workplan outlining the details of the project will be developed and submitted to the Agencies no later than December 31, 1997, for review and approval by U.S. EPA.

PROJECT 4: RAILROAD TRACK RECYCLING

This proposal involves the size reduction, decontamination, and transport off site for recycling and reuse of 300-500 tons of steel train track rails from the former process area. The monetary amount to be expended on this effort will be commensurate with the amount denoted for Project 4 in Paragraph 13 of the settlement agreement. Steel train track rails will be removed from the former process area and decontaminated either through the onsite FEMP Material Release Facility (MRF) or through a private supplier of decontamination and recycling services. Based on the radiological characterization of the train rails, a wide variety of decontamination techniques may be appropriate, including manually operated abrasive blasting (such as vacuum grit blasting or sodium bicarbonate blasting), automated abrasive blasting (such as continuous feed descaling), or other less aggressive techniques. DOE-FEMP will provide to the agencies a detailed Work Plan for this proposal, which will identify the specific decontamination/release strategy to be utilized, the tonnage of steel to be recycled, and a project schedule, by September 15, 1997, for review and approval of U.S. EPA.

PROJECT 5: STRUCTURAL STEEL DEBRIS RECYCLING

This project involves the decontamination, transport, radiological surveying, and recycling and reuse of 300-500 tons of structural steel and/or oversized material (e.g., steel beams, steel mill rollers, mill stands, counterweights, large tanks or pressure vessels, etc.). The monetary amount to be expended on this effort will be commensurate with the amount denoted for Project 5 in Paragraph 13 of the Settlement Agreement. These materials would be decontaminated and recycled through either the onsite FEMP Material Release Facility (MRF) or through a private supplier of decontamination and recycling services. Based on the radiological characterization and physical configuration of the materials, a wide variety of decontamination techniques may be appropriate, including manually operated abrasive blasting (such as vacuum grit blasting or sodium bicarbonate blasting), automated abrasive blasting (such as continuous feed descaling), or other less aggressive techniques. DOE-FEMP will provide to the agencies a detailed Work Plan for this proposal, which will identify the specific decontamination/release strategy to be utilized, the specific materials and tonnages included, and a project schedule, by September 15, 1997, for review and approval of U.S. EPA.